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AN - 2003-285834 [28]

AP - KR20000079454 20001221

CPY - KOEL-N

- KOHY-N

DC - K07 L01

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IC - G21F9/28

IN - CHOI G S; KIM C U; PARK J G; SHIN S U; SONG M J

MC - K07-B01 L01-F

PA - (KOEL-N) KOREA ELECTRIC POWER CORP

- (KOHY-N) KOREA HYDRO & NUCLEAR POWER CO LTD

PN - KR2002050331 A 20020627 DW200328 G21F9/28 001pp

PR - KR20000079454 20001221

XA - C2003-074497

XIC - G21F-009/28

AB - KR2002050331 NOVELTY - A low and intermediate level radioactive waste treatment system is provided to achieve an improved operation of the system by efficiently controlling vitrification and discharge of radioactive waste.

- DETAILED DESCRIPTION - A treatment system comprises a supply unit (20) for supplying low and intermediate level radioactive waste and material to be vitrified; a crucible melter (30) having a melting chamber (32) for providing glass melt so as to vitrify the low and intermediate level radioactive waste and material to be vitrified; a heating and pyrolysis unit (50) installed in the melting chamber of the crucible melter, and which heats, burns and thermally decomposes the low and intermediate level radioactive waste and material to be vitrified; an inductor (60) installed outside the crucible melter, and which melts the material to be vitrified by applying an induction current to the material; a heating and discharge unit (70) for heating the vitrified material such that the material has a reduced viscosity so as to be discharged from the melting chamber of the crucible melter; a cooling unit (80) for controlling discharge of vitrified material; and an air supply unit (90) for bubbling the glass melt by supplying air to the melting chamber of the crucible melter.

- (Dwg.1/10)

IW - LOW INTERMEDIATE LEVEL RADIOACTIVE WASTE TREAT SYSTEM

IKW - LOW INTERMEDIATE LEVEL RADIOACTIVE WASTE TREAT SYSTEM

INW - CHOI G S; KIM C U; PARK J G; SHIN S U; SONG M J

NC - 001

OPD - 2000-12-21

ORD - 2002-06-27

PAW - (KOEL-N) KOREA ELECTRIC POWER CORP

- (KOHY-N) KOREA HYDRO & NUCLEAR POWER CO LTD

TI - Low and intermediate level radioactive waste treatment system

File 351:Derwent WPI 1963-2005/UD,UM &UP=200533

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\*File 351: For more current information, include File 331 in your search.

| Set  | Items | Description      |
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| ? SS | PN=KR | 2002050331       |
| S1   | 1     | PN=KR 2002050331 |
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DIALOG(R)File 351:Derwent WPI  
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WPI Acc No: 2003-285834/ **200328**  
XRAM Acc No: C03-074497

**Low and intermediate level radioactive waste treatment system**  
Patent Assignee: KOREA ELECTRIC POWER CORP (KOEL-N); KOREA HYDRO & NUCLEAR  
POWER CO LTD (KOHY-N)  
Inventor: CHOI G S; KIM C U; PARK J G; SHIN S U; SONG M J; KIM C W; SHIN S  
W  
Number of Countries: 001 Number of Patents: 002

Patent Family:

| Patent No     | Kind | Date     | Applicat No  | Kind | Date     | Week     |
|---------------|------|----------|--------------|------|----------|----------|
| KR 2002050331 | A    | 20020627 | KR 200079454 | A    | 20001221 | 200328 B |
| KR 432450     | B    | 20040520 | KR 200079454 | A    | 20001221 | 200460   |

Priority Applications (No Type Date): KR 200079454 A 20001221

Patent Details:

| Patent No     | Kind | Lan Pg | Main IPC    | Filing Notes                        |
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| KR 2002050331 | A    | 1      | G21F-009/28 |                                     |
| KR 432450     | B    |        | G21F-009/28 | Previous Publ. patent KR 2002050331 |

Abstract (Basic): **KR 2002050331 A**

NOVELTY - A low and intermediate level radioactive waste treatment system is provided to achieve an improved operation of the system by efficiently controlling vitrification and discharge of radioactive waste.

DETAILED DESCRIPTION - A treatment system comprises a supply unit (20) for supplying low and intermediate level radioactive waste and material to be vitrified; a crucible melter (30) having a melting chamber (32) for providing glass melt so as to vitrify the low and intermediate level radioactive waste and material to be vitrified; a heating and pyrolysis unit (50) installed in the melting chamber of the crucible melter, and which heats, burns and thermally decomposes the low and intermediate level radioactive waste and material to be vitrified; an inductor (60) installed outside the crucible melter, and which melts the material to be vitrified by applying an induction current to the material; a heating and discharge unit (70) for heating the vitrified material such that the material has a reduced viscosity so as to be discharged from the melting chamber of the crucible melter; a cooling unit (80) for controlling discharge of vitrified material; and an air supply unit (90) for bubbling the glass melt by supplying air to the melting chamber of the crucible melter.

pp; 1 DwgNo 1/10

Title Terms: LOW; INTERMEDIATE; LEVEL; RADIOACTIVE; WASTE; TREAT; SYSTEM

Derwent Class: K07; L01

International Patent Class (Main): G21F-009/28

File Segment: CPI

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